Amendments to the Claims:

The following listing of claims replaces all prior listings, and all prior versions, of claims in the application.

1. (Currently Amended) A position measuring apparatus for surgery comprising:

a position indicating means for indicating a setting position and a setting direction of a surgical tool, said position indicating means comprising a pair of laser beam emitting means for emitting respective laser beams that intersect in ~~a plane-like manner towards~~ a surgical field;

a three-dimensional position measuring means for measuring a position and a direction of said surgical field and also the setting position and the setting direction of said surgical tool; and

~~means for calculating setting position and direction of said laser emitting means from the emit angle of the laser beam and a laser beam emitting position that is measured by said three-dimensional position measuring means; and~~

a control unit for controlling operation of said position indicating means and said three-dimensional position measuring means,

wherein said position indicating means and said three-dimensional position measuring means being fixed on a common base, so that relative positional relationship therebetween is constant; and

wherein said setting direction for said surgical tool is given in a form of an intersection line.

2. (Cancelled)

3. (Previously Presented) A position measuring apparatus, as described in the claim 1, wherein said position measuring apparatus is held on a stand, which is changeable in its position and direction by being movable while keeping the relative positional relationship between said position indicating means and said three-dimensional position measuring means.

4. (Previously Presented) A position measuring apparatus, as described in the claim 1, wherein said position measuring apparatus is held by an arm, the arm extending from a ceiling and being changeable in a position and a direction by being movable while keeping the relative positional relationship between said position indicating means and said three-dimensional position measuring means.

5. (Currently Amended) A position measuring apparatus, as described in the claim 1, wherein said position measuring apparatus is used for indicating a position and a direction of ~~a surgical~~ said surgical tool during a surgical operation.

6. – 13. (Cancelled)

14. (New) A position measuring apparatus, as described in the claim 1, wherein said surgical tool including plural line indicia serving as reference lines for parallelly-aligning scanning lines of said laser beams impinging onto said surgical tool, as a guide to effect said setting direction of said surgical tool.

15. (New) A position measuring apparatus for surgery comprising:

a position indicating means for guiding a setting position and a setting orientation of a surgical tool, said position indicating means comprising a pair of laser beam emitting means for emitting respective laser beams that intersect in a surgical field;

a three-dimensional position measuring means for measuring a position and an orientation of said surgical field and also the setting position and the setting orientation of said surgical tool; and

a control unit for controlling operation of said position indicating means and said three-dimensional position measuring means,

wherein said position indicating means and said three-dimensional position measuring means being fixed on a common base, so that relative positional relationship therebetween is constant; and

wherein said setting orientation for said surgical tool is given in a form of an intersection line.

16. (New) A position measuring apparatus, as described in the claim 15, wherein said position measuring apparatus is held on a stand, which is changeable in its position and orientation by being movable while keeping the relative positional relationship between said position indicating means and said three-dimensional position measuring means.

17. (New) A position measuring apparatus, as described in the claim 15, wherein said position measuring apparatus is held by an arm, the arm extending from a ceiling and being changeable in a position and an orientation by being movable while keeping the relative positional relationship between said position indicating means and said three-dimensional position measuring means.

18. (New) A position measuring apparatus, as described in the claim 15, wherein said position measuring apparatus is used for indicating a position and an orientation of said surgical tool during a surgical operation.

19. (New) A position measuring apparatus, as described in the claim 15, wherein said surgical tool including plural line indicia serving as reference lines for parallelly-aligning scanning lines of said laser beams impinging onto said surgical tool, as a guide to effect said setting orientation of said surgical tool.

20. (New) A position measuring apparatus for surgery comprising:

a position indicating means for guiding an intersection point as a setting position and an intersection line as a setting orientation of a surgical tool, said position indicating means comprising a pair of laser beam emitting means for emitting respective laser beams that intersect in a surgical field;

a three-dimensional position measuring means for measuring a position and an orientation of said surgical field and also the setting position and the setting orientation of said surgical tool; and

a control unit for controlling operation of said position indicating means and said three-dimensional position measuring means,

wherein said position indicating means and said three-dimensional position measuring means being fixed on a common base, so that relative positional relationship therebetween is constant.

21. (New) A position measuring apparatus, as described in the claim 20, wherein said position measuring apparatus is held on a stand, which is changeable in its position and orientation by being movable while keeping the relative positional relationship between said position indicating means and said three-dimensional position measuring means.

22. (New) A position measuring apparatus, as described in the claim 20, wherein said position measuring apparatus is held by an arm, the arm extending from a ceiling and being changeable in a position and an orientation by being movable while keeping the relative positional relationship between said position indicating means and said three-dimensional position measuring means.

23. (New) A position measuring apparatus, as described in the claim 20, wherein said position measuring apparatus is used for indicating a position and an orientation of said surgical tool during a surgical operation.

24. (New) A position measuring apparatus, as described in the claim 20, wherein said surgical tool including plural line indicia serving as reference lines for

parallelly-aligning scanning lines of said laser beams impinging onto said surgical tool, as a guide to effect said setting orientation of said surgical tool.